

EXHIBIT A

dimethyldidecylamineoxide, dimethytetradecylamineoxide and dimethyltridecylamineoxide. In other embodiments, I further included contacting the biological source material or process intermediate with glycerol. To the best of my knowledge, the prior art did not contain any references wherein viral contaminants were inactivated in a biological source material or process intermediate by contacting the biological source material or process intermediate with an alkylamine.

6. I experienced the unexpected result of inactivating viral contaminants in a biological source material or process intermediate when I contacted a biological source material or a process intermediate with an alkylamine selected from the group consisting of dimethyldecylamine, dimethyltridecylamine, dimethylundecylamine, dimethyldidecylamine, dimethyltetradecylamine, dimethylhexadecylamine, dimethyldecylamineoxide, dimethylundecylamineoxide, dimethyldidecylamineoxide, dimethytetradecylamineoxide and dimethyltridecylamineoxide. My experiment included three controls that were run in parallel with the DMA C14 treated samples. The positive control was bovine viral diarrhea virus (BVDV) added to culture medium. The toxicity and interference controls were prepared by spiking the DMA C14 solution with culture medium, treating the BT culture with the diluted samples and then culturing the BT cells in the absence (toxicity) or presence (interference) of virus.
7. The results are summarized in Table 1 and attached as Exhibit A.

Table 1. Titration of BVDV

Sample	BVDV titer (pfu/ml)
Positive control	1.38×10^8
Interference control	9.08×10^7
Toxicity control	6.50×10^6
DMA-C14 treated	$\leq 1.67 \times 10^0$

Virus was not detected in the DMA-C14 treated control. However, due to the limit of detection for the assay, the titer is reported as less than or equal to 1.67 pfu/ml. The difference between the medium control and the limit of detection for the DMA-C14 treated sample is 6.5×10^6 pfu/ml. Thus, the DMA-C14 induced inactivation of BVDV is greater than or equal to 6.5 logs. This was unexpected, as the prior art did not teach such a result.

8. I have become aware of U.S. Pat. No. 4,481,189 to Prince (the '189 patent). After reading the patent, one of ordinary skill in the art having read the '189 patent would not expect *a priori* that an alkylamine would function as a viral inactivator. Moreover, the '189 patent specifically teaches adding certain enumerated and listed non-ionic detergents along with an alcohol and/or ether. My invention realized that viruses in a biological source material or process intermediate could be inactivated by contacting the biological source material or process intermediate with an alkylamine selected from the group consisting of dimethyldecylamine, dimethyltridecylamine, dimethylundecylamine,